

## Claims

1. A method of diagnosing intolerance by a subject to a specified substance which comprises incubating a leucocyte sample prepared from whole blood drawn from the subject with an extract of said substance and detecting whether or not PMNs in the sample have become activated.
2. A method according to Claim 1, wherein PMN activation is detected optically.
3. A method according to Claim 1, wherein the PMN activation is detected by luminescence, detecting the uptake of dyes or fluorescent markers, photometry, detecting release of cytokines or by detecting release of bioactive molecules, microbial proteins and/or free radicals.
4. A method according to Claim 1, wherein PMN activation is detected by determining whether or not PMNs in the sample have become adhesive.
5. A method according to claim 4, wherein PMN adhesion is determined by assaying adhesion to a plastic surface.
6. A method according to Claim 5, wherein the plastic surface is a plastic multi-well titre plate.
7. A method according to Claim 6, wherein the titre plate contains 96 wells.
8. A method according to Claim 5, wherein the plastic surface is washed to remove unreacted cells, after incubation of the sample with the food extract but before assaying adhesion.
9. A method according to Claim 4, wherein adhesion is detected by lysis and assaying for one or more intracellular markers for PMNs.

10. A method according to Claim 9, wherein the one or more markers are selected from acid hydrolases, myeloperoxidases, lysozyme, lactoferrin, neutral proteases and serine proteases and lactic dehydrogenase.
- 5